REMARKS

Status of the Claims

With the entry of this amendment, the status of the claims will be as follows:

Claims 27, 28 and 31 are currently amended herein.

Claims 1-26, 29, 30, 33 and 34 were previously presented and are unchanged (original).

Claims 35-44 are presented for the first time and are new.

Claim 32 is cancelled.

This amendment to the claims is fully supported by the specification as originally filed. The claim amendments do not introduce new matter. These amendments are made without prejudice and are not to be construed as abandonment of previously claimed subject matter or acquiescence to any objection or rejection of record. The locations of support in the specification for the amendments to the claims is provided in the table below.

Claim Number	Location of Support in the Specification
27 subparagraph (i)	See, page 2, paragraph 0009; page 7, paragraph 0024; page 37, paragraph 114; "efficiency" can be measured by any suitable method for measuring readthrough suppression activity, as described in the section starting on page 9, paragraph 0031
27	See, page 1, paragraph 4; page 6, paragraph 0021; page 29,
subparagraph (ii)	paragraph 0102; page 31, paragraph 0105
28	Amendment corrects a typographical error of obvious nature.
31	See, page 1, paragraph 4; page 6, paragraph 0021; page 29, paragraph 0102; page 31, paragraph 0105
35	See, paragraphs 0010, 0059, 0089, 0093, 0118 and 0168
36	See, paragraphs 0089, 0093 and 0168
37	See, paragraphs 0089, 0093 and 0168
38	See, paragraphs 0089, 0093 and 0168
39	See, paragraphs 0048, 0049, 0182, EXAMPLE 1 at para 0185-0189; see, FIGS. 2A, 2B, 3A and 3B.
40	See, paragraphs 0048, 0049, 0182, EXAMPLE 1 at para 0185-0189; see, FIGS. 2A, 2B, 3A and 3B.
41	See paragraphs 50, 55 and EXAMPLE 1 at para 0185-0189; and see, FIG. 4.
42	See paragraphs 50, 55 and EXAMPLE 1 at para 0185-0189 (especially para 0189); and see, FIG. 4.
43	Support is found throughout the specification. See especially EXAMPLE 1 at para 0185-0189.
44	See, paragraphs 4 and 55.

Applicants respectfully request entry of the amendment prior to substantive examination of the claims.

Response to the Request for Restriction

In the Office Action dated December 15, 2006, the Examiner requested restriction to one of the following groups of claims:

Group I:

Claims 1-22 and 26

Group II:

Claims 23-25

Group III:

Claims 27-30

Group IV:

Claims 31-34

Applicants hereby elect the claims of Group IV (claims 31-34) for prosecution, with traverse. Applicants have cancelled claim 32 and added new claims 35-44, which are dependent on claim 31. Thus, Applicants request that Group IV now include claims 31 and 33-44.

Traversal is made on the grounds that the present application is a United States national phase entry application under 35 U.S.C. § 371. As such, this application is subject to the requirement for Unity of Invention, as defined by the Patent Cooperation Treaty Rule 13. Applicants respectfully request that the Examiner apply the standard of PCT Rule 13 as called for under 37 C.F.R. § 1.475 in making groups for examination in the present application.

It appears that the Examiner for the International Search Authority (ISA; in this case, the USPTO) did not fully comprehend the nature of the claims in making his finding of lack of Unity of Invention, as discussed in the International Search Report and Written Opinion dated October 2, 2006. In that ISR/WO, the ISA made the following groupings of claims:

ISA Group I:

Claims 1-22 and 26

ISA Group II:

Claims 23-25 and 27-30

ISA Group III:

Claims 31-34

As stated in PCT Rule 13, a single invention adheres to the Unity of Invention requirement when the subject matter is linked by a single inventive concept constituting a special technical feature, where the special technical feature makes a contribution over the prior art.

Appl. No. 10/575,991 Page 9

As correctly recognized in the USPTO Office Action dated December 15, 2006, the claims are related as follows:

Claims 1-22 and 26: Compositions comprising novel aminoacyl-tRNA

synthetases;

Claims 23-25: Methods for producing the aminoacyl-tRNA synthetases

of claims 1-22 and 26;

Claims 27-30: Methods for producing the polypeptides of claims 31-34;

Claims 31-34: Compositions comprising a polypeptide comprising a

redox active amino acid.

Under PCT Rule 13, a product and a process specifically adapted for the manufacture of that product are united by a common inventive concept. Claims 1-26 meet the Unity of Invention standard, where this subject matter is related as a product and a process for making the product, and further share the special technical feature of the novel aminoacyl-tRNA synthetases that make a contribution over the prior art. Similarly, claims 27-31 and 33-44, in their amended form, are related as a product and a process for making the product, and further share the special technical feature of the proteins comprising a redox active amino acid, where the proteins make a contribution over the prior art.

Thus, Applicants assert that the revised claim groupings under the proper PCT Rule 13 standard should be as follows:

revised ISA Group I: Claims 1-26

revised ISA Group II: Claims 27-31 and 33-44

In the event that the Office regroups the claims as noted above, Applicants hereby elect the claims of revised ISA Group II (claims 27-31 and 33-44) for prosecution, without further traverse.

Response to the Request for Election of Species

In the Office Action, the Examiner required an election of species for the generic expression "redox active amino acids" in the event that original Group IV was chosen for prosecution. The Examiner also requested a listing of claims readable on the elected species.

As applicable to the claims in Group IV as currently amended (claims 31 and 33-44) and proposed revised ISA Group II (*i.e.*, claims 27-31 and 33-44), Applicants hereby elect the following species for examination:

3,4-dihydroxy-L-phenyalanine (DHP)

Appl. No. 10/575,991 Page 10

This species is readable on each claim in Group IV and revised ISA Group II.

If a telephone conference would expedite the prosecution of this application, Applicants encourage the Examiner to telephone the undersigned at (510) 769-3502.

QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.

P.O. BOX 458

Alameda, CA 94501 Tel: 510 337-7871 Fax: 510 337-7877 Respectfully submitted,

Edward DesJardins, Ph.D.

Reg. No: 51,162

Attachments:

- 1) A petition to extend the period of response for **one** month;
- 2) A transmittal sheet;
- 3) A fee transmittal sheet;
- 4) A receipt indication postcard.